REMARKS

Claims 1-19 were pending and rejected in the above-identified patent application. Claim 1 is being amended. Claims 16-19 are being canceled. Claims 1-15 remain pending. Reconsideration is respectfully requested.

In paragraphs 3 and 4, the Examiner rejected claims 1-5, 7-11, 14 and 15 under 35 USC § 103 as obvious over Gonda in view of Rao and further in view of Brenner.

Claim 1 as amended now requires,

> 16. A system, comprising:
> a connection to a virtual private network;
> a router, coupled to said virtual private network connection, wherein said router maintains a virtual router, said virtual router configurable to be dedicated to a customer, wherein the router receives packets from the virtual private network, each packet having a VPN ID, wherein the router uses the VPN ID and a dedicated virtual routing table to filter packets to the virtual router associated with the VPN ID, wherein the virtual router adds tag information based on the VPN ID to the packets before transmitting the packets to a virtual LAN switch, thereby enabling virtual separation of packets within the router and enabling IP addresses spaces within a private address range to overlap between different clients;
> a server having a plurality of logical partitions, such that the logical partitions are maintained logically separate from each other;
> a virtual LAN switch, coupled to said router and to said server, said virtual LAN switch providing selectable forwarding of information from said virtual router to one of said plurality of logical partitions in accordance with virtual LAN configuration information mapping the virtual router to the logical partition, said virtual LAN switch using the tag information and LAN configuration information to forward the packets to the one of said plurality of logical partitions;
> at least one volume;
> an FC switch, wherein said FC switch provides selectable interconnection between said one of said plurality of logical partitions and said at least one volume, wherein the FC switch uses a storage table to determine an appropriate one of said at least one volume, to confirm rights of the logical partition to access the determined one of said at least one volume, and to forward the packets from the logical partition to the determined one of said at least one volume.

Gonda teaches an integrated network and service management with automated flow through configuration and provisioning of virtual private networks. The examiner admits that

does not teach the use of logical partitions, a virtual LAN using virtual routers, a switch for controlling services. Rao teaches a multi-service network switch with virtual routers. Brenner teaches use of daemons in a partitioned massively parallel processing system environment.

However, none of the references alone or in combination teaches "a router, coupled to said virtual private network connection, wherein said router maintains a virtual router, said virtual router configurable to be dedicated to a customer, wherein the router receives packets from the virtual private network, each packet having a VPN ID, wherein the router uses the VPN ID and a dedicated virtual routing table to filter packets to the virtual router associated with the VPN ID, wherein the virtual router adds tag information based on the VPN ID to the packets before transmitting the packets to a virtual LAN switch, thereby enabling virtual separation of packets within the router and enabling IP addresses spaces within a private address range to overlap between different clients", "a virtual LAN switch, coupled to said router and to said server, said virtual LAN switch providing selectable forwarding of information from said virtual router to one of said plurality of logical partitions in accordance with virtual LAN configuration information mapping the virtual router to the logical partition, said virtual LAN switch using the tag information and LAN configuration information to forward the packets to the one of said plurality of logical partitions", or "an FC switch, wherein said FC switch provides selectable interconnection between said one of said plurality of logical partitions and said at least one volume, wherein the FC switch uses a storage table to determine an appropriate one of said at least one volume, to confirm rights of the logical partition to access the determined one of said at least one volume, and to forward the packets from the logical partition to the determined one of said at least one volume" as recited in claim 1 as amended.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 1 and claims 2-5, 7-11, 14 and 15 which depend therefrom are patentable over Gonda-Rao-Brenner.

In paragraph 5, the Examiner rejected claims 6, 13 and 16-19 under 35 USC § 103 as obvious over Gonda-Rao-Brenner and further in view of Blumenau. To simplify the issues,

Applicant is canceling claims 16-19. Accordingly, Applicant addresses this rejection with reference to claims 6 and 13.

The Examiner admits that Gonda-Rao-Brenner does not disclose a storage management system. The Examiner then asserts that Blumenau col. 2 lines 4-12 teaches a storage management system. Col. 2 lines 4-12 of Blumenau specifically teaches "a storage system include[ing] at least one storage device apportioned into a plurality of volumes, a configuration table to store configuration data identifying which of a plurality of devices coupled to the storage system are authorized to access each of the plurality of volumes, and a filter, responsive to the configuration data, to selectively forward to the at least one storage device requests for access to the plurality of volumes received from the plurality of devices." However, like Gonda-Rao-Brenner, Blumenau does not teach "a router, coupled to said virtual private network connection, wherein said router maintains a virtual router, said virtual router configurable to be dedicated to a customer, wherein the router receives packets from the virtual private network, each packet having a VPN ID, wherein the router uses the VPN ID and a dedicated virtual routing table to filter packets to the virtual router associated with the VPN ID, wherein the virtual router adds tag information based on the VPN ID to the packets before transmitting the packets to a virtual LAN switch, thereby enabling virtual separation of packets within the router and enabling IP addresses spaces within a private address range to overlap between different clients", "a virtual LAN switch, coupled to said router and to said server, said virtual LAN switch providing selectable forwarding of information from said virtual router to one of said plurality of logical partitions in accordance with virtual LAN configuration information mapping the virtual router to the logical partition, said virtual LAN switch using the tag information and LAN configuration information to forward the packets to the one of said plurality of logical partitions", or "an FC switch, wherein said FC switch provides selectable interconnection between said one of said plurality of logical partitions and said at least one volume, wherein the FC switch uses a storage table to determine an appropriate one of said at least one volume, to confirm rights of the logical partition to access the determined one of said at least one volume, and to forward the packets from the logical partition to the determined one of said at least one volume" as recited in claim 1 as amended, from which claims 6 and 13 depend.

Accordingly, for at least these reasons, Applicant respectfully submits that independent claims 6 and 13 which depend from claim 1 are patentable over Gonda-Rao-Brenner-Blumenau.
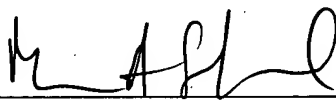
In paragraph 6, the Examiner rejected claim 12 under 35 USC § 103 as obvious over Gonda-Rao-Brenner-Blumenau and further in view of Bradley. The Examiner notes that neither Gonda nor Blumenau teaches application identification and operating system information, and that Bradley adds the missing element. Bradley teaches a method for linking external applications to a network management system. However, like Gonda and Blumenau, Bradley does not teach teaches "a router, coupled to said virtual private network connection, wherein said router maintains a virtual router, said virtual router configurable to be dedicated to a customer, wherein the router receives packets from the virtual private network, each packet having a VPN ID, wherein the router uses the VPN ID and a dedicated virtual routing table to filter packets to the virtual router associated with the VPN ID, wherein the virtual router adds tag information based on the VPN ID to the packets before transmitting the packets to a virtual LAN switch, thereby enabling virtual separation of packets within the router and enabling IP addresses spaces within a private address range to overlap between different clients", "a virtual LAN switch, coupled to said router and to said server, said virtual LAN switch providing selectable forwarding of information from said virtual router to one of said plurality of logical partitions in accordance with virtual LAN configuration information mapping the virtual router to the logical partition, said virtual LAN switch using the tag information and LAN configuration information to forward the packets to the one of said plurality of logical partitions", or "an FC switch, wherein said FC switch provides selectable interconnection between said one of said plurality of logical partitions and said at least one volume, wherein the FC switch uses a storage table to determine an appropriate one of said at least one volume, to confirm rights of the logical partition to access the determined one of said at least one volume, and to forward the packets from the logical partition to the determined one of said at least one volume" as recited in claim 1 as amended, from which claim 12 depends.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 12 is patentable over Gonda-Rao-Brenner-Blumenau-Bradley.

If the Examiner has any questions or needs any additional information, the Examiner is invited to contact the undersigned.
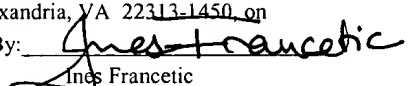
Respectfully submitted,

Dated: <u>November 21, 2005</u>   By _____

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